

**State CIO
Agency IT Plans
2007 – 2009 Biennium**

**Agency Name:
NC Department of Commerce**

July 2006

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Department Overview

Mission Statement

The mission of the Department of Commerce is to improve the economic well being and quality of life for all North Carolinians.

Vision

The Commerce Department envisions North Carolina as a state of well-educated people trained to do the work of the 21st century and to think critically – to solve problems and innovate – to develop new ideas to drive productivity, reduce costs, design products, birth entrepreneurial enterprises and, ultimately, create jobs.

The vision assumes maintaining our reputation as a state of innovation, known for pioneering investment in infrastructure, new science and practical technology and a superior quality of life. It is a vision of North Carolina as the state that differentiates itself in the global economy as the state of knowledge workers, where business succeeds because we have better trained, more creative workers, and because we're the state of new ideas and approaches. We are a state always on the cutting edge, a true state of minds.

Finally, ours is a vision of an economy that continues to create sustainable jobs based on innovation, commercialization of research and a skilled, continuously trained workforce. It is a state that creates new jobs at a pace that always will exceed the loss of jobs that are no longer competitive in a globally open and dynamic marketplace.

Chapter 1 - Departmental/Agency Strategic Business Initiatives and Major Business Requirements

To keep the Department of Commerce vision a reality, agency efforts are concentrated on our Economic Development Strategic Plan organized under the following long-term strategies:

- Invest in education and train a globally competitive workforce
- Develop communities prepared for economic success
- Build and maintain an integrated, contemporary infrastructure
- Nurture innovation and the commercialization of ideas through investment in science, technology and university outreach — to bring the innovations of the lab and classroom into the marketplace
- Maintain an exceptional business climate with affordable costs and provide programs and services for businesses in order to attract new companies to North Carolina, support the growth and success of existing businesses — large and small — and encourage entrepreneurial startups
- Foster North Carolina's quality of life including cultural, natural and heritage assets

Commerce's Cross Functional Steering Committee (CFSC), made up of the Department's senior business managers, is instrumental in building consensus throughout the agency on the prioritization and funding of Information Technology initiatives necessary to successfully enact these strategies. This committee receives recommendations and guidance in the selection, prioritization and implementation of I.T. projects from Commerce's internal Project Management Office (PMO). Introduction of CFSC and PMO guidance and direction in choosing and managing I.T. initiatives has resulted in unified agency wide support for those projects which provide the Department with those tools necessary to meet its obligations and responsibilities to its clients and partners, and most importantly, to the citizens of North Carolina.

Chapter 2 - Requirements for Transitioning Existing IT Activities/Resources

Current projects

CMS – Content Management System:

The goal of this initiative is the completion of a comprehensive WEB redesign effort aimed at consolidating 18+ individual divisional/sectional “silo” sites into a single state-of-the-art Departmental Web site which will present a uniform look and feel, promote a consistent Departmental marketing message, provide improved functionality, employ a standard navigational schema, enhance visitor access and ease of use, and require minimal intervention by Commerce MIS staff for routine Web page content modifications

EDIS – Economic Development Intelligence System:

The goal of the NC Economic Development Intelligence System (EDIS) is to substantially strengthen the economic intelligence capability within the North Carolina Department of Commerce, the Regional Partnerships, and State and local economic development organizations across North Carolina. NC EDIS is a web-based database system that will provide users with access to a wide variety of analytical, statistical, and mapping tools to support strategic economic development activities and research. NC EDIS will be released fall of 2006 and will assist the economic development community in recruitment, retention, and growing new business in North Carolina. The system will deliver the intelligence to support economic and community development decisions. NC EDIS will put North Carolina on an equal footing with other states that are using sophisticated information systems to improve state, regional and local strategic development planning in this era of structural adjustment toward a knowledge-based economy.

EDIS – NC OneMap Integration

The Commerce Department seeks to enhance the geographic information system contained within EDIS to substantially strengthen the economic

intelligence capability within the North Carolina Department of Commerce and the broader economic development community. By partnering with the Center for Geographic Information and Analysis (DENR), Commerce will deliver a product that will integrate NC OneMap functionality with EDIS. The North Carolina Center for Geographic Information and Analysis is the State's lead agency for spatial information and technologies. NC OneMap is the State's comprehensive geographic database and framework for distributed spatial information. The North Carolina Department of Commerce is the State's lead agency for economic development. EDIS is the State's comprehensive economic development database and economic analysis system.

Integration with NC OneMap would allow NC DOC to access and share EDIS spatial data with a broader audience. The integration with NC OneMap would allow access to routinely maintained spatial information at the City, County, State, and Federal level for those participating agencies. The data will not be housed internally but will be called over the internet and pulled into the EDIS spatial viewer. This will ensure that the data represented on the map are the most current data available. NC OneMap has received National attention and is accessed by over 7,000 unique users per month. The integration with OneMap would allow selected Commerce spatial data to be shared within the NC OneMap framework to a broad user base through OneMap. This would also expose Commerce to a broad audience and lead to potential business opportunities.

Buildings and Sites Redesign Initiative

The goal of the Buildings and Sites Redesign is to better market and promote North Carolina's available buildings and sites to our customers. The Department of Commerce currently maintains a buildings and sites system that was developed in 1999 and has not undergone any recent major enhancements. The current system is not meeting the business objectives of the Department or our partners. Buildings and sites are a major tool of economic development organizations for business recruitment and expansion in North Carolina.

Buildings and Sites GPS Collection Initiative

The goal of the Buildings and Sites GPS Collection initiative is to collect geospatial references for the Buildings & Sites database through the use of Global Positioning System (GPS) technologies. The ability to accurately map the Buildings and Sites database will improve analysis and analytical outputs. The intention is to partner with the North Carolina Community College System to collect the coordinates. It is also the intention to develop a pilot partnering with Central Carolina Piedmont Community College's Geospatial Technologies Center. Some key capabilities that this collection will bring to the economic development community are: ability to create accurate visual displays, improve customer service by delivering accurate spatial information, and feed data for analysis to other systems such as EDIS and NC OneMap.

CRM – Customer Relations Management System: The goal of this project is the replacement of a 6 year old in-house developed ASP Web based application (Commerce Application Portfolio – [CAP]) with a third-party maintained and hosted Web based Customer Relations Management application. It is essential that this “On-Demand” system:

- enable more efficient management of the department’s business recruiting efforts and trade programs with existing businesses
- fully integrate with Microsoft Exchange mail and Microsoft Office applications
- provide core services for the purpose of campaign management, lead generation, contact management, account management, and results tracking
- provide flexible dynamic report generation capability for non-MIS staff
- enhance enterprise team communication

Applications:

Applications which are candidates for on-going normal maintenance:

- Apptrack
- Automated Time & Leave Accounting System (ATLAS)-V2
- BLIO Permits/Licensing Information Management System
- CDBG Grants Information System
- DET Software
- Economic Development Information System (EDIS)
- Web Based CDBG Accomplishments Reporting System

Applications which are candidates for modernization/enhancement:

- Commerce Online Web Tools
- Community Investment Reports
- Sites & Buildings
- CDBG Grants Information System
- CDBG Web-Based Accomplishments Reporting System

Applications which are candidates for retirement with replacement:

- Commerce Application Portfolio
- BLIO Consultant/Client Contact Tracking System

Infrastructure assets

The following infrastructure assets are to be replaced on a yearly basis in accordance with departmental replacement policy:

- 1/3 Personal Computers and software
- 1/4 Servers Hardware and Software
- 1/4 Server Backup Devices
- 1/6 Switch Devices

Operations/IT management

The NC Department of Commerce has established a Cross Functional Steering Committee (CFSC) consisting of senior managers throughout the department. Among other responsibilities, the CFSC is charged with the review, selection, and final approval of all projects to be undertaken within the department, including those which are classified as Information Technology projects. Recommendations for new and/or enhanced systems are presented to the CFSC and, once consensus is reached among the senior business leaders, those projects with the most potential to enable Commerce staff to successfully address strategic objectives of the department receive priority staffing and funding.

Additionally, Commerce has developed a Project Management Office to implement industry best practices in project management as they relate to the Project Management Institute. The PMO works directly with the Cross Functional Steering Committee Chair, (Secretary Jim Fain), to support and advise all activities of the CFSC. The PMO has developed and defined methodologies for Commerce project reviews, approvals, reporting, and management throughout the project lifecycle.

Hardware consolidation has already begun within the department. Those efforts will continue over the next year until only Print and Files services and application test and development servers remain at off-site offices. WEB, SQL, and production servers which are not moved in Fiscal 06/07 will be relocated from remote offices to Commerce's computer room located on the 7th floor of the DPI building. Hardware consolidation will simplify disaster recovery data backup and off-site storage, provide more timely response to outages by the infrastructure staff housed in this building, and reduce costs by eliminating redundant backup equipment at multiple locations. The completion of Commerce's migration to the ESAP model currently being implemented by ITS will also be completed during this period. Membership in the ESAP Commerce VRF will provide total network access to all of our local and remote offices throughout the state. Not only will this enhance capabilities of staff in these off-site locations, it will also allow members of Commerce's infrastructure staff to perform diagnostics and apply corrective measures from the central office thereby drastically reducing travel costs and improving productivity.

Human resources

The vast majority of Commerce's existing critical computer applications are written utilizing ASP technologies which are no longer being supported by the vendor. Due to ASP upgrades not being included in newer enhanced hardware and software releases, these applications will continue to run in the foreseeable future but they will be incapable of taking advantage the more robust systems

coming to market. In order to address this deficiency and contingent upon fund availability, Commerce's applications development staff will receive extensive training in Microsoft's C# and Visual Basic .NET development tools and methodologies. The backbone of Commerce's back office and Web Content Management System is Microsoft centric and adaptation of the Microsoft development suit of products ensures maximum compatibility between operating systems and development methodologies.

Chapter 3 - IT Specific Economic-Driven Requirements or Opportunities

Significant cost reduction and improved services will be derived from a number of initiatives to be undertaken and/or completed. As previously noted, completion of the department's migration to the ESAP model will substantially reduce MIS' travel costs by enabling remote problem diagnostic and resolutions services from the central office.

Completion of the current Content Management System Web redesign project which is designed to provide end-users with the ability to manage their on Web page content will both improve the accuracy and timeliness of information made available to Commerce clients and to the public. This will also more efficiently utilize the skills and expertise of Web development and support staff by allowing them to address new issues and develop improved applications rather than spending much of their time addressing routine Web page content changes that the end-user will be capable of performing without MIS intervention.

Lastly, also as previously noted, consolidation of servers and services will contribute to either cost savings or will allow the department to avoid cost increases while simultaneously providing improved services and enhanced Information Technology solutions to pressing business requirements.

Chapter 4 - IT Initiatives Developed From and Aligning With Plan Drivers

Initiative 1

CMS – Content Management System:

Completion of a comprehensive WEB redesign effort aimed at consolidating 18+ individual divisional/sectional "silo" sites into a single state-of-the-art Departmental Web site which will present a uniform look and feel, promote a consistent Departmental marketing message, provide improved functionality, employ a standard navigational schema, enhance visitor access/ ease of use,

and require minimal intervention by Commerce MIS staff for routine Web page content modifications

Initiative 2

EDIS – Economic Development Intelligence System:

The NC Economic Development Intelligence System directly aligns with almost all of the strategic objectives for the NC Department of Commerce and also aligns with the strategic objectives of the NC Economic Development Board. The goal of the NC Economic Development Intelligence System (EDIS) is to substantially strengthen the economic intelligence capability within the North Carolina Department of Commerce, the Regional Partnerships, and State and local economic development organizations across North Carolina. This initiative aligns with almost all of the Strategic Objectives of the Department of Commerce as NC Economic Development Board strategic objectives. NC EDIS is a web-based database system that will provide users with access to a wide variety of analytical, statistical, and mapping tools to support strategic economic development activities and research. NC EDIS will be released fall of 2006 and will assist the economic development community in recruitment, retention, and growing new business in North Carolina. The system will deliver the intelligence to support economic and community development decisions. NC EDIS will put North Carolina on an equal footing with other states that are using sophisticated information systems to improve state, regional and local strategic development planning in this era of structural adjustment toward a knowledge-based economy.

EDIS – NC OneMap Integration

The EDIS – NC OneMap initiative aligns with key Commerce strategic objectives: enhance quality of information, provide “best-in-class” customer service, improve the communication of information, help communities prepare for economic success, and assist in maintaining an exceptional business climate. EDIS integration with NC OneMap would allow NC DOC to access and share EDIS spatial data with a broader audience. The integration with NC OneMap would allow access to routinely maintained spatial information at the City, County, State, and Federal level for those participating agencies. The data will not be housed internally but will be called over the internet and pulled into the EDIS spatial viewer. This will ensure that the data represented on the map are the most current data available. NC OneMap has received National attention and is accessed by over 7,000 unique users per month. The integration with OneMap would allow selected Commerce spatial data to be shared within the NC OneMap framework to a broad user base through OneMap. This would also expose Commerce to a broad audience and lead to potential business opportunities.

Initiative 3

Buildings and Sites Redesign Initiative

The Buildings and Sites Redesign initiative aligns with key Commerce strategic objectives: enhance the quality of information, provide, provide “best-in-class” customer service, help prepare communities for economic success, and assist in maintaining an exceptional business climate. The Buildings and Sites Redesign will assist marketing and promoting North Carolina by providing accurate and complete information about the properties and integrating with other strategic tools (ie EDIS).

Initiative 4

Buildings and Sites GPS Collection

The Buildings and Sites GPS Collection initiative aligns with key Commerce strategic objectives: enhance the quality of information, provide “best-in-class” customer service, and help prepare communities for economic success. The goal of the Buildings and Sites GPS Collection initiative is to collect geo-spatial references for the Buildings & Sites database through the use of Global Positioning System (GPS) technologies. The ability to accurately map the Buildings and Sites database will produce improved analysis and analytical outputs. The intention is to partner with the North Carolina Community College System to collect the coordinates. It is also the intention to develop a pilot partnering with Central Carolina Piedmont Community College’s Geospatial Technologies Center. Some key capabilities that this collection will bring to the economic development community are: ability to create accurate visual displays, improve customer service by delivering accurate spatial information, and feed data for analysis to other systems such as EDIS and NC OneMap.

Initiative 5

CRM – Customer Relations Management System:

Major objectives to be achieved and benefits/value to the agency/state: The Department of Commerce seeks a customizable, web-based enterprise-level Customer Relationship Management System that will allow department personnel to more effectively store, share, and manage information relating to industry recruitment and retention. Such a system would provide the agency with the following benefits:

- Integrated system for working economic development projects that could help change sales culture positively
- Capability to readily share client information across the department
- Better alignment and support to DOC business processes
- Lower cost of ownership and easier maintenance
- Capability to manage marketing programs designed to nurture leads through the entire sales life cycle

It is estimated the project will begin in earnest in the 4th quarter of 2006 and conclude in the 2nd quarter of 2007. The CRM project meets a number of the strategic objectives identified by the Secretary's Cross Functional Steering Committee including:

- Build a high performance organization.
 - Enhance the quality of information.
 - Provide "best-in-class" customer service.
 - Promote individual and organizational learning and teamwork.
 - Improve the communication of information.
- Maintain an exceptional business climate.

CRM has no relationship with or to current statewide initiatives/projects. It is estimated that the total five years of Operations & Maintenance will be less than \$500,000. Costs of implantation include professional services to map business processes, migration of existing data to new system and configuration of system to follow business processes. Beyond implementation, the main cost is the subscription for the system and training of a power user.

Initiative 6

Enhancements to Commerce's consolidated Web Site:

During development of the detailed user requirement document for the Content Management System based consolidated Commerce Web site numerous items were requested for inclusion in the project which were beyond the scope of the original RFP and Statement of Work. Contingent upon inclusion in the Governor's recommended budget, detailed project plans will be developed to accomplish these enhancements, entries will be made in the Project Portfolio Management system, and funding requirements will be finalized and included in the expansion budget process. This initiative is aligned with ITS' efforts to manage projects for superior results.

Initiative 7

Redesign of Commerce's Intranet:

Contingent upon inclusion in the Governor's recommended budget, detailed project plans will be developed to reengineer and enhance the department's intranet utilizing the capabilities provided by the Microsoft Content Management System software purchased for support of Commerce's public facing Web presence. Detailed user requirement analysis, staffing needs, and funding requirements will be finalized and included in the expansion budget process once the project is given priority by the department's Cross Functional Steering Committee.

Initiative 8

Server/Network Consolidation:

Over the next 12 months WEB, SQL, and production servers which are not moved in Fiscal 06/07 will be relocated from remote offices to Commerce's computer room located on the 7th floor of the DPI building. This consolidation will result in simplified disaster recovery data backup and off-site storage, provide more timely response to outages, enhance infrastructure staff physical access to the devices for routine and emergency maintenance and reduce costs by eliminating redundant backup equipment at multiple locations. This initiative is aligned with ITS' efforts to consolidate common shared technical infrastructure and technical services. Additionally, all remote sites will be included in the Commerce ESAP VFR thereby allowing replacement of multiple firewall devices which often require resource intensive support with a single firewall device for the entire Commerce network.